GENERAL NOTES

1. All railings shall be fabricated and erected as indicated on the Plans.

2. Posts shall be set perpendicular to top of parapet. For post spacing see Plans. (Maximum 8'-0" Spacing).

3. Rails shall be parallel to the grade of the roadway. Rail section shall be attached to as many posts as possible, but not less than three (except where indicated otherwise on Plans).

4. The center line of any splice and/or expansion joint shall be located at least 2'-0" away from center line of a post except where indicated otherwise on Plans. Expansion and/or splice joints for each strand of two strand railing shall be placed in the same location and in the same panel.

5. Material for rails, posts (including bases), splices and clamp bars shall conform to ASTM B 221, Alloy 6061 T6. Rails shall have a mill finish. Posts shall have a mill finish except that any sawed surfaces shall have a finish comparable to 250 Microinch. Rails and splices shall conform to ASTM B 221, Alloy 6351 T5 for chemical composition only.

6. Material for rail end plates shall conform to ASTM B 209, Alloy 6061 T6. Material for cast rail end caps shall meet the requirements of B 108, Alloy SG 70A, S5A; and S7A for chemical composition only.

7. Material for anchor studs shall meet the requirements of A 276, Type 304 Stainless Steel, annealed, hot finished, ultimate strength 70 000 psi, 20 percent minimum elongation. Threads may be rolled or cut.

8. Material for heavy hex nuts shall conform to ASTM B 211, Alloy 6061 T6 or 6262 T9.

9. Material for steel nuts shall conform to ASTM A 307.

10. Material for aluminum washers shall be ALCLAD conforming to ASTM B 209, Alloy 6061 T6 or 7075 T6.

11. Material for rivets shall conform to ASTM B 316, Alloy 6061 T6 and 6053 T61 for chemical composition only, and MIL-R-1150 in all other respects. The rivets shall be button head and cone point and shall be cold driven.

12. Bolts may be used in lieu of rivets for connecting post to post base plate. Material for bolts shall be of stainless steel conforming to ASTM A 193 Identification Symbol B8. Nuts shall conform to ASTM A 194 Type 8 or 8 NA. Material for washers shall conform to ASTM A 276, Type 304. Specified Specified torque level for bolts connecting base plate to post shall be 150 to 175 ft·lb. Burr threads by centerpunching at top of nut. Punch marks shall be spaced at 120 degrees.

13. Material for clamp bar tap screws and cap screws shall be stainless steel conforming to ASTM A 193, Identification Symbol B8.

14. Material for anchor plates shall be steel conforming to ASTM A 709, Grade 36.

15. Material for pins shall be Alloy 6061 T6 and pins shall be press fit.

16. Post bases shall sit on a single thickness of preformed fabric bearing pad conforming to 910.02.03. The pad shall contact the entire bottom surface of the base plate with not more than $\frac{1}{8}$ inch protruding beyond the base plate on any side.

17. Weld metal for the welded base plate shall be 5356 A-1.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 2/23/77

REVISIONS	
SHA	FHWA
11-15-95	·
9-24-96	·
8-16-00	·
1-22-01	·

FHWA APPROVAL
DATE: 2-25-77

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

GENERAL NOTES
ALUMINUM BRIDGE RAILING

STANDARD NO. BR-SS(5.01)76-35 SHEET 1 OF 7

SUPER-RAILING-BARRIER